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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,994	03/20/2007	Teunis Abram Klijn	00307.0045.PCUS00	9248
23369	7590	11/04/2010	EXAMINER	
HOWREY LLP-HN			ROBINSON, ELIZABETH A	
C/O IP DOCKETING DEPARTMENT			ART UNIT	PAPER NUMBER
1299 Pennsylvania Avenue, NW, Room B-3			1787	
Washington, DC 20004-2402				
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11/04/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/586,994	KLIJN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Elizabeth Robinson	1787

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 November 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  They raise the issue of new matter (see NOTE below);
  - (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-7, 19 and 21.

Claim(s) withdrawn from consideration: 10-18 and 20.

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.
12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13.  Other: \_\_\_\_\_.

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1787

/E. R./  
Elizabeth Robinson  
Examiner, Art Unit 1787

Continuation of 3. NOTE: The amendment to claim 21 raises new 35 U.S.C. 112, second paragraph issues. It is now unclear whether the claimed layered double hydroxides of claim 21 are the nanoparticles of claim 1 or additional particles that are added to the composition. If claim 21 with the original wording were to depend from claim 2, this would overcome the 35 U.S.C. 112, second paragraph rejection of claim 21.

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant argues that binder is not required in Rohrbaugh et al. (US 2002/0028288). However, Rohrbaugh also teaches that the coating can comprise polyurethane (Paragraph 264). Thus, it is clear that Rohrbaugh teaches compositions that can also comprise binders.

Applicant argues that the polymeric material of Rohrbaugh is only what is adsorbed onto the nanoparticles and thus, would not be present at the amount claimed. However, Rohrbaugh teaches that the coating composition can comprise adjunct materials at about 0.01 to about 99.99% by weight of the coating composition (Paragraph 91). The adjunct materials include polymers (organic binders) (Paragraph 252). The cited teachings of Paragraph 116 do not say that the adsorbed material is the only polymeric material present. Claim 4 does not require that the binder consists of the claimed polymeric species, only that it comprises a binder selected from this group.

Applicant argues that binders do not absorb onto nanoparticles, but provides no rationale why this is not the case. Further, the teaching of Rohrbaugh is that the polymer adsorbs onto the nanoparticle (attaches to the surface) not absorbs (is taken inside the particle).

Applicant argues that there is no teaching in Rohrbaugh that the polymers are or can be organic binders. However, polymeric materials are organic. Even so called inorganic polymers (siloxanes) comprise an organic component. These materials bind to some degree and thus, are considered to be binders.

Regarding Applicant's request for a telephonic interview, in order to act on the application in a timely manner, this Office Action is being set forth. Should Applicant desire a telephonic interview, the Attorney is welcome to telephone the Examiner to set up a time for an interview. It is noted that the Examiner does not have authorization to place an international call.

If the claim amendments were entered, the 35 U.S.C. 112, second paragraph rejection over claim 7 would be overcome.